

AMENDMENTS TO THE CLAIMS

1-33. (CANCELED)

34. (CURRENTLY AMENDED) A lithographic ink for use in a lithographic printing process onto a polymer substrate, the ink comprising a metal or carbon particulate material suspended in a mixture of a resin, an antioxidant, and an organic solvent, wherein:

- a. the resin comprises a polyamide, and
- b. the metal or carbon particulate material constitutes 50%-90% of the weight of the ink.

35. (CANCELED)

36. (CURRENTLY AMENDED) The lithographic ink of claim 34 wherein the ink is printed on ~~a substrate~~ the substrate with at least one electrically conducting layer situated thereon.

37. (CURRENTLY AMENDED) The lithographic ink of claim 34 wherein the ink is printed on ~~a substrate~~ the substrate with at least two or more stacked electrically conducting layers situated thereon.

38. (CURRENTLY AMENDED) The lithographic ink of claim 34 wherein the ink is printed on ~~a substrate~~ the substrate with a first electrically conducting layer deposited thereon by electroless deposition.

39. (PREVIOUSLY PRESENTED) The lithographic ink of claim 38 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.

40. (PREVIOUSLY PRESENTED) The lithographic ink of claim 38 wherein a second electrically conducting layer is electroplated atop the first electrically conducting layer.
41. (PREVIOUSLY PRESENTED) The lithographic ink of claim 40 wherein an electrical component is attached to the first or second electrically conducting layer by a conductive polymer adhesive.
42. (CURRENTLY AMENDED) The lithographic ink of claim 34 wherein ~~the ink is printed on a flexible polymer sheet~~ the substrate whereupon the ink is printed is a flexible polymer sheet.
43. (CURRENTLY AMENDED) The lithographic ink of claim 34 wherein:
- a. the ink is printed on ~~a substrate~~ the substrate, with the ink having a thickness of less than about 5 microns;
 - b. a first electrically conducting layer is situated atop the ink, with the electrically conducting layer having a thickness of less than about 4 microns.
44. (PREVIOUSLY PRESENTED) The lithographic ink of claim 43 wherein the substrate is a flexible polymer sheet.
45. (PREVIOUSLY PRESENTED) The lithographic ink of claim 44 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.
- 46-49. (CANCELED)

50. **(CURRENTLY AMENDED)** A lithographic ink for use in a lithographic printing process, the ink comprising:
- a. a particulate material which constitutes 50%-90% of the weight of the ink, the particulate material including ~~at least one of metal and carbon~~ metal or carbon; and
 - b. a mixture wherein the particulate material is suspended, the mixture including:
 - (1) a polyamide resin,
 - (2) an antioxidant, and
 - (3) an organic solvent;~~wherein the mixture is at least substantially free of water.~~

51-54. **(CANCELED)**